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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,495	03/30/2004	Stephen J. Rothermel	10420US01	4893

7590 03/23/2006

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EXAMINER	
KAPADIA, VARSHA A	
ART UNIT	**PAPER NUMBER**
2627	

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/813,495	ROTHERMEL ET AL.	
	Examiner	Art Unit	
	Varsha A. Kapadia	2651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ~~040204~~.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Information Disclosure

The information disclosure statement (IDS) submitted on 7/12/04 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Rejection Under 35 U.S.C. 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 6-15 and 17-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Dugas et al (2005/0168869).

With regards to claims 1 and 4, Dugas et al disclose a servo writing apparatus comprising: a first servo write head comprising first gap (see fig. 2 element 22 and disclosure thereof); a second servo write head comprising one or more second write gaps (see fig.2 element 22' and disclosure thereof) arranged to define time-based servo pattern (see paragraphs [036]-[0038] ; wherein Dugas also disclose that the first gap and the second gap define servo channel corresponding to servo band; and the first and second write gaps are aligned in the servo channel within 10 micrometer as claimed).

With regards to claim 2, Dugas et al shows a shield between the first and the second write head (see fig. 2).

With regards to claim 3, Dugas et al disclose the time-based servo pattern as recited in the claim (see fig. 11 and paragraph [0030]).

With regards to claim 6, Dugas et al disclose a first servo write head comprise a first coil controlled to provide a direct current magnetic field across the first write gap and the second servo write head comprises a second coil controlled to provide magnetic field pulses across the second write gaps (see fig. 2 disclosure thereof and paragraph [0025]-[0026]).

With regards to claim 7, Dugas et al disclose first head comprising a first core and the second head comprising second core as claimed (see fig.2 disclosure thereof and paragraph [0030] and [0036]).

With regards to claims 8 Dugas et al disclose that the second servo write head comprise a surface thin film head that define the second write gaps (see fig. 2 disclosure thereof and paragraph [0034]).

With regards to claims 9 and 11, Dugas et al disclose that the first and second servo write heads are mounted in the mounting structure (see fig.2 disclosure thereof and paragraph [0028]-[0029]).

With regards to 10, Dugas et al disclose mounting structure having a width and the separation distance as defined in the claim (see fig. 2 disclosure thereof and paragraph [0028]-[0030]; wherein broad range of the ratio is considered inherent function of the mounting structure).

With regards to claims 12-13, the limitations recited in claims 12 and 13 are similar to those recited in claims 1 and 9, therefore, rejection applied to claims 1 and 9 above in this office

action is also applied to claims 12-13 for the same reasons. Furthermore, core is inherent part of the inductive head (see paragraphs [0028]-[0030] and fig. 2).

With regards to claim 14, the method recited in claim 14 corresponds to the apparatus limitations recited in claim 1, therefore, the rejection applied to the apparatus claim 1 above in this office action is also applied to method claim 14 for the same reasons of anticipation.

With regards to claim 15, Dugas et al disclose the alignment of the first write gap and the second write gaps as claimed (see paragraphs [0028] – [0030]).

With regards to claims 17 and 19, Dugas et al disclose bonding of the first and the second write heads as claimed (see paragraphs [0034] – [0036] and [0030]).

With regards to claim 18, Dugas et al disclose mounting of the first and the second servo write heads as claimed (see fig. 2, disclosure thereof and paragraph [0028]).

With regards to claim 20, Dugas et al disclose that forming of the first and second write gap includes using a single mask as claimed (see paragraphs [0034] – [0036]).

Rejection Under 35 U.S.C. 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dugas et al (2005/0168869) in view of Dugas et al (2005/0157422 referred to as '422 from here on).

With regards to claim 5, Dugas et al disclose the invention as described above in this office action but fails to specify that the width of the data track is less than 18 micrometer width of the servo band is 190 micrometer.

Dugas et al in '422 however such width of the track and the servo band disclose is well known and widely used in the art, see for example Dugas et al '422 in paragraph [0099].

It would have been obvious to one of ordinary skill in the art at the time this invention was made to modify the invention disclosed by Dugas et al with the above teachings from Dugas et al '422 to specify the width of the servo band and the data track to provide increase the accuracy.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dugas et al (2005/0168869) in view of Beck et al (6,700,729).

With regards to claim 16, Dugas et al disclose the invention as described above in this office action but fails to further disclose the alignment tool comprising a microscope as claimed.

Beck et al however, discloses the alignment tool comprising a microscope (see col.16 lines 37-41).

It would have been obvious to one of ordinary skill in the art at the time this invention was made to modify the invention disclosed by Dugas et al with the above teachings from Beck et al '422 inorder to provide an aligning tool comprising microscope to magnify the micron sizes and hence enhance the aligning precision, as taught be Beck et al.

Prior Art Cited

Reference to Joannou (4,996,609) cited as of interest.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Varsha A. Kapadia whose telephone number is (571) 272-7557. The examiner can normally be reached on Mon Tue and Thurs. from 6:30 AM to 2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on 571 272 4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VK

WAYNE YOUNG
SUPERVISORY PATENT EXAMINER